

THE IMPACT OF SCIENCE ON LITERATURE

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In the world of bewildering flux of ideas and tentative experimentation, it will be a subject of increasing interest to pen down a few lines about the impact which science has made upon the forces of literature.

Literally speaking, science and literature indubitably are two incompatible modes of human knowledge but a sedulous study of the entire gamut of literature will reveal and reflect that science and literature have gone in the pristine past check by jowl are infact two different thought tributaries of the same river of knowledge. This thing becomes amply clear if we make a deligent perusal of Prof.J.Bronowski's book entitled, "The Common Sense Of Science "in which the learned writer brings home the same conclusion i.e. science and literature are inter-dependent and both have contributed to the development and flowering of each other.

If we delve deeply into the recesses of human knowledge and make a panoramic study of the trends and tendencies which have happened in the inexhaustibly fecund womb of knowledge, one is constrained to say that science and literature though basically different activities of human mind have not been at logger-head with each other. Rather, the two activities, scientific and literary, have always gone cheek by jowl and each has been influenced by the other. It is superfluous to say that literature has been driven in an isolated and tranquil groove of sensibility and into the jungles and the forests of romanticism, untouched and unaffected by the scientific progress of the time was nor is it that science has not been coloured and tinged by the poetic vision of the great poets and poetasters, seers and servants. Oddly, enough, there has been a close link between the forces of religion and science and each has given a potent imprint on the other. It is not that scientists have not been literary luminaries and literatueus not scientists. This world has been sciens deeply moved by the poetry and eminent literary figures lured and attracted by the intectualism based upon concrete facts and reasoning, of science. The phalanx of scientists and literary artists realized that an exclusively literary craftsmanship.

A superb 19th century scientist, Tyndall, tells how he was spurred on in the pursuit of science by inspiration drawn from Tennyson. Darwin was delighted to read the dramas of Shakespeare and the poems of Milton, Wordsworth and Shelly and goes on recording that when in the evening of his life he developed a distaste for poetry, he felt profoundly that his life was maimed and stunned, sapped completely and eroded of all the charm and mental elation and exaltation which he drank abundantly from the springs of literature. Equally interested in literature were the renowned scientists Humphry Davy and Rohan Hamilton. Versification was their avocation while scientific research was their vocation. Thomas Huxley too gazed on the literary pastures and innumerable other examples can be sited to reveal the interest of scientists in the realm of literature.

The literary moorings were well adored and elevated by the poetic contributions of scientists. Ptolemy, a second century astronomer had a poet in him the proof of which is given in the folling lines which he penned in eulogizing celestial bodies, revealing thereby his profound literary acumen:

"Mortal tho' I be, yea ephemeral, if but a moment
I gaze up to the night's starry domain of heaven,
Then no longer on earth I stand; I touch the creator,
And my lovely spirit drinketh immortality."

These thought provoking lines glisten the literary mind of Ptolemy .Coming to our own times , Ronald Ross set down his spiritual diary of seven years of exile devoted to malarial research in verse. Even more in 20th century , H.G. Wells and Julian Huxley, thought fed and bred on the literary meadows have been equally interested in science and scientific research.

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All this implies non enmity between science and literature and supreme success in both depends not only on a predilection and proclivity of one's genius, but also on application as strenuous as one can.

But despite this lucid presentation of the dual role of scientists and artists there still exists a fundamental difference between the two twigs of the same tree of knowledge. For the business of science is to ascertain facts and to set in intelligible and ordered relation the facts of the physical world, literature takes her domain the life of man in all its multifestations and working through intuitions quickens that life to a lofty consciousness. Science least speak of man as social being but literature which exalts man as a spiritual being.It is the work of literature to throw light on the superb and serene sensibilities, emotions and feelings of men. To science the values of life like love, beauty ,affection, hopes, fears ,freedom etc. are foreign.A poet likes the flower due to its beauty but for scientist will dissect its beauty and let the fascination of the flower wither away under the searching and penetrating light of his cold analysis.

Bacon, the essayist was lured by science. It was the life blood and master passion of Bacon's life. Bacon glimpsed in man a vast unexplored kingdom of knowledge, if only he will be humble enough and patient enough to occupy it, and he constituted himself its champion.To the galaxy of scientists, Bacon was Moses of science.

The Elizabethan dramatist were more influenced by the reacherches of new science and his Doctor Faustus, Marlowe makes the learned Doctor of Germany interested in the mysteries of the astronomical sciences, Chaucer, predecessor of Marlowe , had been interested by the science of astronomy and his

'Astrolable'is a literary man's contribution to the understanding of celestial bodies and is an early scientific treatise by the Father of English Poetry. The greatest interest of this book lies in the fact that it presents the spectacle of an early example of scientific application of literature and literary application of science.

The shooting advance of science was retarded by the civil wars but gained its central laboratory and as it were its temple in the Royal Society, which was an off-shoot of informal meetings held in Oxford and London of a small coterie of scientists. The Royal Society(1662) the forte of which was to advance the cause of science and it self based on the suggestions which Bacon had dropped in New Atlantic;and Cowley in propositions for the advancement of Experimental Philosophy. Royal Society became the focal point of leading lights of literature and the origin members of the society were Denham, Evelyn, Walter, Cowley and Dryden .These literary eminences were influenced tremendously by the deliberations of Royal Society. The pre-Royal Society period was pre-occupied with such writings which dwelt upon the problems of man's fatality and fatalism, individual soul, but in the post -Royal Society period, literary men, instead of being lost in the world of philosophical and mystical values, began to be pre-occupied with the problems of reality. It was realism which allured and attracted the writers.

To quote De Selin court:

"Man was brought from heaven to earth, the effects of scientific discovery upon many sides of their life could be filtered into their minds. Their child like faith in tradition was ousted by common sense, and darker forms of superstitions fell into disrepute."

The geneis and growth of science not only left its indelible impression upon the style and tone of spate of coming writings but inculcated and imbibed in the minds of writers to be more precise accurate and exact in the realm of writing but also changed the process of approach to the day-to-day problems and left its influence in the formation of English prose style. The language of emotion and poetry is colourful and rhythmic whereas the language of science is terse, precise and exact. So with the dawn of science the scale of writing twilted in favour of matter rather than in the old, eloquent, gorgeous, rhythmic and verbose fashion.

Even during the period of romanticism science gave food for thought to the poets. Wordsworth the doyen of romantic movement was deadly opposed to the advance of science and its faith in critical enquiry, rational survey and coldblooded analysis. Wordsworth opined that a scientist 'murders to dissect' and this is not the way for appreciating nature. Mind of man was the main region of Wordsworth's song and in the mind of man he being introvert he found elements that the mechanistic conception of nature was wholly incompetent to vouchsafe. He dethroned reason from absolute monarchy among the faculties of man and relegated science to a subordinate status.

Reaching to Victorian era, we find science catching free with literature. Darwin's 'Origin of Species' was a landmark in the scientific history of the Victorian period. This book invited a sharp comment from Huxley who summed up this book in the words, "It is doubtful whether any single book except Newton's Principia, ever worked so great and so rapid a revolution in science, or made so deep an impression on the general mind.

Darwin's monumental work brought an earthquake in the minds and hearts of Victorian theologians, traditionalists and conventionalists because it made a scathing indictment of the theological basis of the creation of the universe.

Robert Bridges another poet and contemporary of Hardy and Meredith on a different pedestal and like Wordsworth admitted that there was no quarrel between science and versification. He though believed that science does not answer to the spirit of man and still less even about love of beauty.

The scientific preponderance in 20th century is calamitous, may well prove tragic because a sizable section of world's available genius is absorbed by science to the penalty and impoverishment of not only literature but even more of the realm of practical affairs in which ideas are applied to life.

More than a century ago of this period Shelly believed: Our calculations have outrun our conception i.e. we have eaten more than we can digest. The cultivation of sciences, which inflated man's empire over the external world, has for want of poetic faculty, circumscribed those of the internal world, and then man having enraged the elements remains himself a slave."

Science and literature as stated earlier have gone side by side. The Romantic Revival (1798) and French Revolution 1789, almost occurred simultaneously proving thereby the aforementioned contention. Royal Society though a body meant for scientists had on its records literary stars like Dryden and Cowley-again proving the interdependence of each other. Because for the vivid expression of scientific ideas one requires a lucid literary style expression. So it all tells that science and literature, though incompatible modes of human thought have existed side by side and continue to do so. Only in this lies the full fruition of the human knowledge.

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